BIOE/STAT 440 – SYLLABUS
STATISTICS FOR BIOENGINEERING

Instructor

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Office hours by appointment

Course Assignments

The topic of this course is the application of statistics in bioengineering, medicine and biology. With few exceptions, homework will be assigned each class and due at the start of the following class period. Graders will not accept homework papers given directly to them without previous authorization from the Instructor. No late homework will be accepted. Illness and family emergencies will be dealt with on an individual basis. Each homework question will be worth 10 points. Graded homework assignments will be returned the following class period. Solutions will be made available. Students must complete 60% of the homework to pass the class.

The first test will be posted online on February 2 (M) and will be due on February 6 (F). The second test will be posted on February 20 (F) and will be due on February 27 (F). The tests will be closed-book, but students may consult the statistical tables at the end of the textbook. Late exams will not be accepted. Students must complete both exams to pass the class.

Tentative Course Schedule

Lecture times are MWF 1:00-1:50pm in Ryon 201. The course will run from January 12 (M) to February 27 (F). Homework due dates are listed in parentheses.

Week of	**Monday**	**Wednesday**	**Friday**
Jan 12	*Lecture 1* Syllabus & Excel	*Lecture 2*: Descriptive Stat Chapter 2	*Lecture 3*: Desc Stat/Probability Chapter 2 (hw1)
Jan 19	MLK Day	*Lecture 4:* Prob Dist Chapter 4 (hw2)	*Lecture 5*: Sampling Chapter 5 (hw3)
Jan 26	*Lecture 6:* Estimation Chapter 6 (hw4)	*Lecture 7*: Hypoth Test Chapter 7 (hw5)	*Lecture 8*: Hypoth Test Chapter 7 (hw6)
Feb 2	*Lecture 9*: Hypoth Test Chapter 7 (hw7)	No class	*Lecture 10*: ANOVA Chapter 8 (test)
Feb 9	*Lecture 11*: ANOVA Chapter 8 (hw8)	*Lecture 12*: ANOVA Chapter 8 (hw9)	Lecture 13: Lin Regr Chapter 9 (hw10)
Feb 16	Lecture 14: Lin Regr Chapter 9	Lecture 15: Multiple Regr	Lecture 16

	(hw11)	Chapter 10 (hw12)	(hw13)
Feb 23	Lecture 17	*Lecture 18*	(test)

( ) Homework/test due

Textbook

The text, Biostatistics: A Foundation for Analysis in the Health Sciences, 10th edition, by Wayne Daniel (2008) is available at the Rice Campus Bookstore. This is an important reference book to have as a practicing engineer or scientist.

Grading Policy

The final grade will be based on the following:

Homework: 30%

Test#1 35%

Test#2 35%

Honor Code Policy

Students are encouraged to talk to each other, the teaching assistants or the instructor about any homework assignment. This assistance is limited to the discussion of the problem. Students are not allowed to look at homework problems or solutions or quizzes/exams from previous years. Questions about grades on homework/midterm papers should be brought to the attention of the Instructor within 5 days from the date you receive the graded papers.

Any student with a documented disability needing academic adjustments or accommodation is requested to speak with me during the first two weeks of class. All discussions will remain confidential. Students with disabilities should also contact Disability Support Services in the Ley Student Center.